Claims

1. A method for winding a paper, board or material web on a winder of the two-drum type, in which winding process separate rolls are formed side by side around winding cores (10) placed one after the other while supported by support members, and in which method the winding cores (10) are supported at their ends against one another by means of core chucks arranged in connection with the free ends of the outermost winding cores (10), in which method, the winding core (10) ends placed against each other are coupled to be on the same axis of rotation during winding by means of severing cuts (12U, 12N) which are formed in the ends (11A, 11B) of the winding cores (10) and which deviate from a perpendicular cutting line, **characterized** in that, in the method, allowance for longitudinal yielding between the winding cores (10) placed against one another is adjusted by means of the depth and shaping of the severing cut (12U) and the mating cut (12N) placed against each other in order to provide axial play between the winding cores (10).

2. A method as claimed in claim 1, **characterized** in that the severing cuts (12U, 12N) are made directly in the end (11A, 11B) of the winding core (10) or in a separate piece attached to the end (11A, 11B) of the winding core (10).

3. A method as claimed in claim 1, **characterized** in that the severing cuts (12U, 12N) that deviate from a perpendicular cutting line, i.e. a severing cut and its mating cut, are groovings which are placed such that in the ends (11A, 11B) of the winding cores (10) placed in end-to-end relationship there is a male grooving (12U) and a female grooving (12N) against each other.

4. A winder for a paper, board or material web for winding the web on a two-drum type winder, which winder winds slit component webs out of which separate rolls are formed side by side around winding cores (10) placed one after the other while supported by support members, in which winder a core chuck has been

arranged in connection with the free ends of the outermost winding cores (10) to keep the roll cores placed one after the other in place, in which winder, two winding cores (10) placed against each other in end-to-end relationship have been coupled to each other for the time of winding by means of severing cuts (12U, 12N) which have been made in the ends (11A, 11B) of the winding cores (10) and which deviate from a perpendicular cutting line, **characterized** in that the shape or the cutting depth of the severing cut and the mating cut of the winding cores (10) have been dimensioned such that there remains allowance for longitudinal yielding between the winding core (10) ends (11A, 11B) placed against each other.

5. A winder as claimed in claim 4, **characterized** in that the severing cuts comprise a severing cut (12U) and its mating cut (12N) which have been made either directly in the material of the winding core in the end (11A, 11B) of the winding core (10) or in a separate piece attached to the end (11A, 11B) of the winding core (10).

6. A winder as claimed in claim 4 or 5, **characterized** in that a severing cut (12U) that deviates from a perpendicular cutting line has been shaped in the ends (11A, 11B) of the winding core (10) and a mating cut (12N) has been shaped in the winding core (10) to be placed against it, i.e. groovings which have been placed such that in the ends (11A, 11B) of the winding cores (10) placed in end-to-end relationship there is a male grooving (12U) and a female grooving (12N) against each other.

7. A method for manufacturing a winding core for a winder, in which method, at least one severing cut (12U, 12N) which deviates from a perpendicular cutting line is made in the end of the winding core (10) to keep the winding cores on the same axis of rotation in the winder during winding, in which method, at least one severing cut (12U) deviating from a perpendicular cutting line and its mating cut (12N) are made in the winding cores (10) to be placed against one another in the

winder, **characterized** in that, in the method, the depth of the severing cuts which deviate from a perpendicular cutting line and which are to be placed against each other is made such that they do not fully correspond to each other but the grooves on one side of the winding cores (10) to be placed against each other are unequal in depth, thereby providing axial play.

8. A method as claimed in claim 7, **characterized** in that a severing cut deviating from a perpendicular cutting line is made either directly in the end of the winding core (10) or in a separate piece attached to the end of the winding core (10).

9. A method as claimed in claim 7 or 8, **characterized** in that a groove or groovings are shaped in the end of the winding core (10), which groovings are placed such that in the ends of the winding cores (10) to be placed in end-to-end relationship in the winder there are male and female groovings (12U, 12N) against each other, i.e. a cut deviating from a perpendicular cutting line and a cut of its desired mating shape.

10. A method as claimed in any one of claims 7 to 9, **characterized** in that, in the method, the grooving is formed of at least one groove or its part.

11. A method as claimed in any one of claims 7 to 10, **characterized** in that the severing cut that deviates from a perpendicular cutting line is made by turning on a lathe, milling/cutting, grinding, heating, pressing or swaging.

12. A winding core (10) for a winder, in the end of which winding core (10) at least one severing cut deviating from a perpendicular cutting line has been made to keep the winding cores on the same axis of rotation in the winder during winding such that at least one severing cut (12U) deviating from a perpendicular cutting line and its mating cut (12N) have been made in the winding cores (10) to be placed against each other in the winder, **characterized** in that the shape or the cutting depth of the severing cut and the mating cut of the winding cores (10)

have been dimensioned such that there remains allowance for longitudinal yielding between the winding core (10) ends (11A, 11B) placed against each other.

13. A winding core (10) as claimed in claim 12, **characterized** in that a severing cut deviating from a perpendicular cutting line is either directly in the end of the winding core (10) or in a separate piece attached to the end of the winding core (10).

14. A winding core (10) as claimed in claim 12 or 13, **characterized** in that in the end of the winding core (10) there is a groove or groovings, which have been placed such that in the ends of the winding cores (10) to be placed in end-to-end relationship in the winder there is a male and a female grooving (12U, 12N) against each other, i.e. a cut deviating from a perpendicular cutting line and a cut of its desired mating shape.

15. A winding core (10) as claimed in any one of claims 12 to 14, **characterized** in that the grooving in the end of the winding core (10) has been formed of at least one groove or its part.